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OM protein - protein search, using sw model

Run on: December 26, 2001, 10:35:29 ; Search time 9.67 Seconds  
(without alignments)  
611.308 Million cell updates/sec

Title: US-09-497-967-7  
Perfect score: 2540  
Sequence: 1 MKNILVILIISLFINQIKS.....QCDNFNLISILLISYILL 468

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 68061 seqs, 12631088 residues

Total number of hits satisfying chosen parameters: 68061

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : Pending\_Patents\_AA\_New: \*  
1: /cgn2\_6/ptodata/2/paa/PCT\_NEW\_COMB.pcp.\*  
2: /cgn2\_6/ptodata/2/paa/US06\_NEW\_COMB.pcp.\*  
3: /cgn2\_6/ptodata/2/paa/US07\_NEW\_COMB.pcp.\*  
4: /cgn2\_6/ptodata/2/paa/US08\_NEW\_COMB.pcp.\*  
5: /cgn2\_6/ptodata/2/paa/US09\_NEW\_COMB.pcp.\*  
6: /cgn2\_6/ptodata/2/paa/US10\_NEW\_COMB.pcp.\*  
7: /cgn2\_6/ptodata/2/paa/US60\_NEW\_COMB.pcp.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	2540	100.0	468	5	US-09-497-967-7
2	2533	99.7	468	5	US-09-497-967-7
3	921	36.3	442	5	US-09-497-967-6
4	801.5	31.6	409	5	US-09-497-967-61
5	424	16.7	76	5	US-09-497-967-57
6	404	15.9	72	5	US-09-497-967-55
7	403	15.9	71	5	US-09-497-967-58
8	389	15.3	72	5	US-09-497-967-60
9	375	14.8	70	5	US-09-497-967-56
10	373	14.7	70	5	US-09-497-967-59
11	237.5	9.4	914	5	US-09-975-143-47
12	222.5	8.8	4852	1	PCT-US01-32140-33
13	212	8.3	72	5	US-09-977-053-4
14	197.5	7.8	975	5	US-09-886-055-431
15	186	7.3	410	5	US-09-500-746-17
16	185	7.3	399	5	US-09-497-967-62
17	183.5	7.2	1842	5	US-09-977-053-6
18	183.5	7.2	3571	5	US-09-977-053-4
19	179.5	7.1	89	5	US-09-497-967-9
20	179.5	7.1	425	5	US-09-500-746-18
21	179.5	7.1	1551	5	US-09-970-318-4
22	177	7.0	605	5	US-09-976-594-616
23	175	6.9	377	5	US-09-500-746-20
24	172.5	6.8	89	5	US-09-497-967-10
25	172.5	6.8	709	5	US-09-991-496-121
26	170.5	6.7	462	5	US-09-500-746-23

27	170	6.7	376	5	US-09-500-746-19	Sequence 19, Appl
28	168.5	6.6	69	5	US-09-497-967-11	Sequence 11, Appl
29	162.5	6.4	735	5	US-09-898-570-10	Sequence 10, Appl
30	162.5	6.4	845	5	US-09-898-570-12	Sequence 12, Appl
31	162.5	6.4	974	5	US-09-898-570-14	Sequence 14, Appl
32	162	6.4	1009	5	US-09-898-570-16	Sequence 16, Appl
33	153.5	6.0	83	5	US-09-497-967-8	Sequence 8, Appl
34	153	6.0	392	5	US-09-898-570-39	Sequence 39, Appl
35	150.5	5.9	1169	5	US-09-801-368-106	Sequence 106, App
36	150.5	5.9	1169	5	US-09-487-558-106	Sequence 106, App
37	144.5	5.7	320	5	US-09-991-496-22	Sequence 22, Appl
38	144.5	5.7	320	5	US-09-991-496-55	Sequence 55, Appl
39	144	5.7	292	5	US-09-500-746-21	Sequence 21, Appl
40	143.5	5.6	610	5	US-09-857-670-19	Sequence 19, Appl
41	142.5	5.6	871	5	US-09-868-987-21	Sequence 21, Appl
42	142.5	5.6	871	5	US-09-886-468-21	Sequence 21, Appl
43	140	5.5	566	5	US-09-900-449A-6	Sequence 6, Appl
44	139.5	5.5	639	5	US-09-900-449A-4	Sequence 4, Appl
45	137.5	5.4	572	5	US-09-900-449A-7	Sequence 7, Appl

ALIGNMENTS

RESULT 1  
US-09-497-967-7  
; Sequence 7, Application US/09497967  
; GENERAL INFORMATION:  
; APPLICANT: Clark, Theodore G.  
; APPLICANT: Dickerson, Jr., Harry W.  
; APPLICANT: Lin, Iian-Long  
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF  
; FILE REFERENCE: 235.00170101  
; CURRENT APPLICATION NUMBER: US/09/497,967  
; PRIOR FILING DATE: 2000-02-04  
; PRIOR APPLICATION NUMBER: 60/131,121  
; PRIOR FILING DATE: 1999-04-27  
; PRIOR APPLICATION NUMBER: 60/118,634  
; PRIOR FILING DATE: 1999-02-04  
; PRIOR APPLICATION NUMBER: 60/122,372  
; PRIOR FILING DATE: 1999-03-02  
; PRIOR APPLICATION NUMBER: 60/124,905  
; PRIOR FILING DATE: 1999-03-17  
; NUMBER OF SEQ ID NOS: 102  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 7  
; LENGTH: 468  
; TYPE: PRT  
; ORGANISM: Ichthyophthirius multifiliis  
US-09-497-967-7

Query Match 100.0%; Score 2540; DB 5; Length 468;  
Best Local Similarity 100.0%; Pred. No. 7.9e+199;  
Matches 468; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	1	MKNILVILIISLFINQIKSANGCPVGTETNTAGQVDDLGTPANCVCNKFNFNNAAFV	60
Db	1	MKNILVILIISLFINQIKSANGCPVGTETNTAGQVDDLGTPANCVCNKFNFNNAAFV	60
Qy	61	PGASTCTPCPKKDKAGQPNPATANLVTCNVKCPAGTAIAGGATDYAAITTECVNCRI	120
Db	61	PGASTCTPCPKKDKAGQPNPATANLVTCNVKCPAGTAIAGGATDYAAITTECVNCRI	120
Qy	121	NFYNENAPNFNAGASTCTACPVNVRVGALTAGNAATIVACQNVACPTGALDDGVTDDV	180
Db	121	NFYNENAPNFNAGASTCTACPVNVRVGALTAGNAATIVACQNVACPTGALDDGVTDDV	180
Qy	181	RSTFECVKRLNYYNGNGNTFPNPGKSQCTPCPAIKPANVAQATLGNDAITTAQCNA	240
Db	181	RSTFECVKRLNYYNGNGNTFPNPGKSQCTPCPAIKPANVAQATLGNDAITTAQCNA	240

RESULT 3  
US-09-497-967-6  
US-09-497-967-6

Query Match      36.3%; Score 921; DB 5; Length 442;  
Best Local Similarity    41.8%; Pred. No. 1.le-67;  
Matches         214; Conservative    45; Mismatches 139; Indels 114; Gaps 19;

QY    1   MKNNILVILLISLFNIQKSNCPVTETNTAGQVD----DLGITPANCVCQKNFYNNNA   56  
         ||| ||| ||| ||| ||| :::: | | | | | | | | | | | | | | | | | | |  
         ||| ||| ||| ||| ||| :::: | | | | | | | | | | | | | | | | | |

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Query Match      36.38;   Score 921.;   DB 5;   Length 442;
Best Local Similarity 41.88;   Pred. Qn 1.le-67;
Matches 214;   Conservative 45;   Mismatches 139;   Indels 114;   Gaps

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QY    1   MKNNILVILIISLFINQIKSANCPCVGTEINTAGVD---DLGTPANCVCNQNFYYNNA 56  
      |||:|||||:|||||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    1   MKYNILLIILIISLFINELNRPDGTQTQ-AGLTIDGAADLGT---CVNCRPNFYINGG 56  
QY    57   AAFVPVGASTCTCPPOKDKAGAOPNPATANLVTCQNVKCPAGTAIAGGATDYAAITECV 116  
      |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    57   AA-----OGEANGNOPFAAN-----71  
QY    117   NCRIFYENAPNFNAGASTCTACIPVRNVGGALTAGNAATIIVAOCNVACPCTGTDLDGVT 176  
      |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    72   -----NARGICVPCQINRVGSVTNAGDLATLAIOCTCQCTGTALDDGVT 117  
QY    177   TDXYRSFTECVKRULNFYNGNN--GNTP-----FNPG-----KSQCTPCPAIKPAN 221  
      :||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    118   DVEDRSAACVKCKPKNFYNYGSGSGEAFGVQVFAGAAAAGVAAVTSQCVPCLNK--N 175  
QY    222   VAQATLGNDATITACQNCVACPDSGTISAGVNWNVAQNTE---CTNCAPNFYNN-----N 272  
      :||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    176   DSPATAGAQAANLATQCSNOCPGTGLVDDGVT--LVFNITSATLCVKRCRNFYNGSGSQGE 233  
QY    273   APN---FNPG-----NSTCLPCPANKDYGBAETAGGAATTAKQCNIAACPDTGTAIAS 320  
      :||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    234   APGVQVFAAGAAAGVAAVTSQCVPCCIKNK--DSPATAGAQAANLATQCSOCPTGTAIQD 290  
QY    321   GAT--NWVILQTECLNCAANFYFDGNNFQASGRCKACPKANKVQGAVATAGTATLIAQCA 375  
      :||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||: |||:  
Db    293   GVTLVFSNSSTQCSQCIANYFFNG-NFEAGKSOCLKCPVSKTTPAHA--PGWTATQATOCL 350

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QY 380 LCPAGTGLTDTSTYKQAASECVKCAANFYTTKQTDVWAGIDTCTSCNKKLTSGAEAN 439
Db 351 TTCPAGTGLDGTSTNFWASATECTKCSAGFASKTGTGTAGTDTCTECTKKLTSGATAK 410
QY 440 LPESAKKNQOC---DFANFLSISLLISYLL 468
Db 411 VYAEATQKVQCASTTFKAFLSISLLFSYLL 442

RESULT 4
US-09-497-967-61
; Sequence 61, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Clark, Theodore G.
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHTHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 60/124,905
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 61
; LENGTH: 409
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
US-09-497-967-61

Query Match 31.6%; Score 801.5; DB 5; Length 409;
Best Local Similarity 39.5%; Pred. No. 4.8e-58;
Matches 187; Conservative 39; Mismatches 137; Indels 111; Gaps

QY 23 CPVCTETNTAGQVD---DLGITPANCVCNCKNFYNNAAAFVPGASTCTCPQKKDAQAG 78
Db 4 CPDGTQTQ-AGLTDVGAADLGT---CVNCRPNFYNGGAA-----QGEAN 44

QY 79 PNPPATANLVTCNVKCPAGTAGATGATDYAAIIITCEVNCRINFYENAPFNAGASTCT 138
Db 45 GNOPFAAN-----NARGICV 60

QY 139 ACPVNRVGGALTAGNAATIVAOQCNVACPGTGTALDDGVTTDYYVRSFTCEVKCRLNFYNGN 198
Db 61 PCQINRVGSVNTAGDLATLATQCTGTGTALDDGVTFDVSRAAQCVCCKPNFYNGG 120

QY 199 N--GNTP-----FNPG-----KSQCTPCPAIKPANVAQATLGNDATITAOQCNVACPD 243
Db 121 SPOGEAPGVQVFAAGAAAGAAVAVTSQCVPCOLNK--NDSPATAGAANLATOCSNOCP 178

QY 244 GTTSAQVNNVNAQNTPE---CTNCAPNFYNN-----NAPN---FNPG-----NST 282
Db 179 GTVLDDGVT--LVFNTSATLVCKRPNFYNGSGSPOGEAPGVQVFAAGAAAGAAVAVTSQ 236

QY 283 CLPCPANKDYGAETAGGATLAKCNITACPDGTATIASGAT-NVYILQTECLNCAANFYF 341
Db 237 CVPCQLNKN--DSPATAGAANLATOCSQCTPGTATQDGVTLVFSNSTQCSQCIANYFF 295

QY 342 DGNFQAGSSRCKACPANKVQAVATAGGTATLTAQCALECPAGTGLTDTGTTSTYKQAA 401
Db 296 NG-NFEAGKSQCLCKPVSKTTPAHA-PCNTATQATQCLTTCAGTGLDDGTSTNFWASAT 353

QY 402 ECYKCAANFYTTKQTDVWAGIDTCTSCNKKLTSGAEANLPSAKKNTQCFDANF 455
Db 402 ECYKCAANFYTTKQTDVWAGIDTCTSCNKKLTSGAEANLPSAKKNTQCFDANF 455

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Wed Dec 26 12:01:38 2001

us-09-497-967-7.rapn

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Query Match      15.9%; Score 404; DB 5; Length 72;
Best Local Similarity 100.0%; Pred. No. 1.2e-26;
Matches 72; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 23 CPVGTETTAGVDLGPANVCNCKNFYNNAAAFVPGASTCTPCPQKKDAGAQPNPP 82
      |||||||
Db 1 CPVGTETTAGVDLGPANVCNCKNFYNNAAAFVPGASTCTPCPQKKDAGAQPNPP 60

QY 83 ATANLVTCNVK 94
      |||||||
Db 61 ATANLVTCNVK 72

RESULT 7
US-09-497-967-58
; Sequence 58, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHATHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 60/124,905
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 58
; LENGTH: 71
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
US-09-497-967-58

Query Match      15.9%; Score 403; DB 5; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.4e-26;
Matches 71; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 241 CPDGTISAAGVNNVAQNTCTNCAPNFYNNAPNPNPNCSTCLPCPANKDYGAETAGG 300
      |||||||
Db 1 CPDGTISAAGVNNVAQNTCTNCAPNFYNNAPNPNPNCSTCLPCPANKDYGAETAGG 60

QY 301 AATLAKQCNIA 311
      |||||||
Db 61 AATLAKQCNIA 71

RESULT 8
US-09-497-967-60
; Sequence 60, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHATHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372

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; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 60/124,905
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 60
; LENGTH: 72
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
US-09-497-967-60

Query Match      15.3%; Score 389; DB 5; Length 72;
Best Local Similarity 100.0%; Pred. No. 2e-25;
Matches 72; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 382 CPAGTVLTGTTSTYKQAASECYKCAANFYTTKOTDWAVIDTCTSCNKKLTSGAENLP 441
      |||||||
Db 1 CPAGTVLTGTTSTYKQAASECYKCAANFYTTKOTDWAVIDTCTSCNKKLTSGAENLP 60

QY 442 ESAKKNITQCDFA 453
      |||||||
Db 61 ESAKKNITQCDFA 72

RESULT 9
US-09-497-967-56
; Sequence 56, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Clark, Theodore G.
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHATHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 60/124,905
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 56
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
US-09-497-967-56

Query Match      14.8%; Score 375; DB 5; Length 70;
Best Local Similarity 100.0%; Pred. No. 2.6e-24;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 95 CPAGTAIAGGATDYAAIITECVNCRINFYNENAPNPNAGASTCTACPVNVRVGALTAGNA 154
      |||||||
Db 1 CPAGTAIAGGATDYAAIITECVNCRINFYNENAPNPNAGASTCTACPVNVRVGALTAGNA 60

QY 155 ATIVAOCNVA 164
      |||||||
Db 61 ATIVAOCNVA 70

RESULT 10
US-09-497-967-59
; Sequence 59, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Clark, Theodore G.
; APPLICANT: Dickerson, Jr., Harry W.

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; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; FILE REFERENCE: ICHTHYOPHTHIRIUS
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR APPLICATION NUMBER: 60/124,905
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: Patentin Ver. 2.1
; SEQ ID NO 59
; LENGTH: 70
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
US-09-497-967-59

Query Match      14.7%; Score 373; DB 5; Length 70;
Best Local Similarity 100.0%; Pred. No. 3.8e-24;
Matches 70; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 312 CPDGTAIASGATNYVILQTECLNCAANFYFDGNNFQAGSSRCKACAPANKVOGAVATAGGT 371
DB 1 CPDGTAIASGATNYVILQTECLNCAANFYFDGNNFQAGSSRCKACAPANKVOGAVATAGGT 60

QY 372 ATLIAQCALE 381
DB 61 ATLIAQCALE 70

RESULT 11
US-09-975-143-47
; Sequence 47, Application US/09975143
; GENERAL INFORMATION:
; APPLICANT: HSU, Daniel, K.
; APPLICANT: LIU, Fu-Tong
; TITLE OF INVENTION: GALECTIN EXPRESSION IS INDUCED IN
; FILE REFERENCE: DANHSU.001C1
; CURRENT APPLICATION NUMBER: US/09/975,143
; PRIOR FILING DATE: 2001-10-10
; PRIOR APPLICATION NUMBER: PCT/US00/08561
; PRIOR FILING DATE: 2000-03-29
; NUMBER OF SEQ ID NOS: 47
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 47
; LENGTH: 914
; TYPE: PRT
; ORGANISM: human
US-09-975-143-47

Query Match      9.4%; Score 237.5; DB 5; Length 914;
Best Local Similarity 25.7%; Pred. No. 5.6e-12;
Matches 123; Conservative 9; Mismatches 208; Indels 139; Gaps 19;

QY 23 CPVGTENTAGQVDDLTGPANVCNKNFYNNNAAFVPGASTC-----TPCPQKKDAG 76
DB 500 CACGCTTCAA-----TGAGAACAC-----AGGAGAGTCATTGTTTGCAATACAA 544

QY 77 AQNPPTANALVTCNVKCPAGTAIAGGATDYAAIIITECVNCRINFYENAFNFGAST 136
DB 545 AGCTGGATA-----ATACTGGGAGGAAGAAAGACAGTC-----GGTT 585

QY 137 CTACPNVRVGGAL-TAGNA-----ATTVAOCNVACPTGTALDDGVTTDYVRSFTECVKRL 191
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DB 586 TTCCCATTTGAAAGTGGAAACCATTTCAAAATACAAAGTACTGGTTGAACCTGACCA----- 641
QY 192 NFYNGNNGNTPENPKSQCTPCPAKPNVAQAVILGNDATITAOCNVACPDGTTISAAGV 251
DB 642 -----CTTCAAGGTTGCAGTGAATGAT---GCTCAGTTGTTGCAGT 679
QY 252 -----NNWVAQNTFCNCAPNFYNNNPNFNPCNSCLPCPANKVDYGAT--- 297
DB 680 ACAATCATCGGGTTAAAAAACT-CAA-----TGAAATCAGCAAACTGGGAATTC 728
QY 298 ---AGGAATLAKQCNITACPDG-----TAIASGATNYVILQTECLNCAANFYFDGNNFQ 347
DB 729 TGGTGACATAGACCTCACCAGTGTTCATATACCATGATATAATCTGAAA-----GGGC 783
QY 348 AGSSRCKACAPANKVOGAVATAGGTATLIAQCALECPAG-----TVLTDGT----- 392
DB 784 AGATTAAAAA-----AAAGAAATCTAAACCTTACATGTGTAAAGGTTTCATGTTCACTG 843
QY 393 -----TSTYKQAAASECVKCA--ANFYTTTKQTDWVAG-IDTCTSCNKKLTSGAEA 438
DB 844 TGAGTGAATAATTTTACATTATCAATATATCCCTCTTGTGAAGTCATCTACTTAATAATA 902

RESULT 12
PCT-US01-32140-33
; Sequence 33, Application PC/TUS0132140
; GENERAL INFORMATION:
; APPLICANT: BIOGEN, INC.
; APPLICANT: GARBER, Ellen
; APPLICANT: LYNE, Paul
; APPLICANT: SALDHANA, Jose W.
; TITLE OF INVENTION: HUMANIZED ANTI-LT-BETA-R ANTIBODIES
; FILE REFERENCE: A100 PCT
; CURRENT APPLICATION NUMBER: PCT/US01/32140
; CURRENT FILING DATE: 2001-10-12
; PRIOR APPLICATION NUMBER: 60/240,285
; PRIOR FILING DATE: 2000-10-13
; PRIOR APPLICATION NUMBER: 60/275,289
; PRIOR FILING DATE: 2001-03-13
; PRIOR APPLICATION NUMBER: 60/299,987
; PRIOR FILING DATE: 2001-06-21
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 33
; LENGTH: 4852
; TYPE: PRT
; ORGANISM: Homo Sapien
PCT-US01-32140-33
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Query Match      8.8%; Score 222.5; DB 1; Length 4852;
Best Local Similarity 24.8%; Pred. No. 5.4e-10;
Matches 112; Conservative 11; Mismatches 208; Indels 121; Gaps 19;

QY 62 GASTCTPCPKQKIDAGPNPPATANLVTCNVKCPAGTAIAGGATDYAAIIITECVNCRIN 121
DB 3523 GTCGCAACSEQDCAG-----AGACAATGC---CAAGACAGCCTCTAC-----CTGC--- 3566

QY 122 FYNENAFNAGA--STCTACPNVRVGGALTAGNAATIVAAQCNVA-CPTGTALDDGVTTD 178
DB 3567 -----AGATGAGCAGCCTGAGGCTGAGGACACACGCGCATGDCATGTATTGTTT- 3615

QY 179 YVRSFTECVKRLNF-----YVNGNNGTNPENPKSQCTPCPAKPNVAQA 225
DB 3616 -----CGCCAGCCCGGAAAGGGCTGGGGCTGAGGACACAGCTGTGTATTACT 3668

QY 226 TLG-----NDATTIACNVACPDGTTISAAGVNNWVAQNTFCNCAPNF----- 268
DB 3669 GTGTAAGAGDGTGACTATTACATGTATTGG-----GTGCGCCAGGCCCCGGGAAAGGG 3721

QY 269 -YNNNAPNPNPGNST-----CLPCPANK-----DYGAETAGGA-----ATLAK 306
DB 3722 GCTGGAGDGGGGCTGAGGACACAGCTGTGTATTACTGCGCAAGAGAGAGAAATGGTAAC 3781
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; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-886-055-431

Query Match      7.8%; Score 197.5; DB 5; Length 975;
Best Local Similarity 23.9%; Pred. No. 1e-08;
Matches 101; Conservative 6; Mismatches 221; Indels 95; Gaps 16;

QY 23 CPVGTETNAGVDDLTGPANVCNQNFYNNAAAFVPGASTCTPCPKQKDAAGAPNPP 82
DB 102 CATCTTTGTGGTGGCTATAA-CAGCCAACITGGTCA--TGATTCTGCTCATCCAC----- 153
QY 83 ATANLVTCQNVKCPAGTAIAGGATDYAAIITECVNCRINFINYNENAPNFNAGASTCTACPV 142
DB 154 ATGGACTCC--CGCCTCCACACACCCATGACTTCTTGC---TCAGCCAGC-TCCTCAT 206
QY 143 NRVGGALTAGNNAITVAQCNVACPTGTALDGVTTDYVRSFTECVKRLNFYNGNNGNT 202
DB 207 CATGGATACCATCTACATCT---GTATCACTGTCCCAAGATGTCTC----- 250
QY 203 PFNPKGSOCTPCPAIKPANVAQATILGNDATITACQNVACPDGTISAAGVNNWVAQNTCT 262
DB 251 ---AGGACTCTCTGTCGAAGGACAGACCATTTCTCTCTGGGCTGTGCAGTTCCAGATCT 307
QY 263 NCAPNFYNNNAPNFNPGNSTCLPCKPANKDYGAET-----AGGAATLAKOCNIACPDG-- 315
DB 308 TCC-----TCTACCTGACCTGATTTGGAGGGGAATTTCTCTCTGGGT 351
QY 316 -TAIASGATNYVILQTECLNCAANFYFDGNNFQAGSSRCKACAPANKVOGAVATAGGTATL 374
DB 352 CTCTATGCG-----CTA-----TGACCGCTATGTGGCT---GTGTG 383
QY 375 IAQCALECPA--GTVLTDGTTSTYKQAASECVKCAANFYTTKQIDWVAGIDTCTSCNKKL 432
DB 384 CAACCCCTTAGGTACCTCTCTCTCATGAACCGCAGGTTT-----GCTTATTCTATGG 436
QY 433 TSG 435
DB 437 TGG 439

RESULT 15
US-09-500-746-17
; Sequence 17, Application US/09500746
; GENERAL INFORMATION:
; APPLICANT: Winchester, Robert J.
; APPLICANT: Gulko, Percio
; APPLICANT: Seki, Tetsunori
; TITLE OF INVENTION: USES OF INHIBITORS FOR THE ACTIVATION OF CXCR4 RECEPTOR BY SDF
; TITLE OF INVENTION: TREATING RHEUMATOID ARTHRITIS
; FILE REFERENCE: 0575/57005-B
; CURRENT APPLICATION NUMBER: US/09/500,746
; CURRENT FILING DATE: 2000-02-09
; NUMBER OF SEQ ID NOS: 23
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 17
; LENGTH: 410
; TYPE: PRT
; ORGANISM: Human
; US-09-500-746-17

Query Match      7.3%; Score 186; DB 5; Length 410;
Best Local Similarity 25.1%; Pred. No. 3.5e-08;
Matches 102; Conservative 9; Mismatches 180; Indels 116; Gaps 17;

QY 20 SANCVPVGTETNAGVDDLTGPANVCNQNFYNNAAAFVPGAS--TCTPCPKQKDAAG 77
DB 46 NANGGGTGCNTNGNNGNAGANANTGN-----NTGGA---GAAGACA-----ANGGG 90
QY 78 QPNPPATANLVTCQNVKCPAGTAIAGGATDYAAIITECVNCRINFINYNENAPNFNAGASTC 137
; SEQ ID NO 431
; LENGTH: 975

; TYPE: PRT
; ORGANISM: Homo sapiens
; US-09-886-055-431

Query Match      8.3%; Score 212; DB 5; Length 72;
Best Local Similarity 53.6%; Pred. No. 4.3e-11;
Matches 37; Conservative 12; Mismatches 20; Indels 0; Gaps 0;

QY 382 CPAGTVLTDGTTSTYKQAASECVKCAANFYTTKOTDWWAGIDTCTSCNKKLTSAGAEANLP 441
DB 1 CPAGTVLDDGTSTNFVASATECTKCSAGFFASKTTGTAGTDTCTCTCKLTSGATAKYI 60
QY 442 ESAKKNQOC 450
DB 61 AEATQKQOC 69

RESULT 14
US-09-886-055-431
; Sequence 431, Application US/09886055
; GENERAL INFORMATION:
; APPLICANT: STRYER, LUBERT
; APPLICANT: ZOZULYA, SERGEY
; TITLE OF INVENTION: RECEPTOR FINGERPRINTING, SENSORY PERCEPTION, AND
; TITLE OF INVENTION: BIOSENSORS OF CHEMICAL SENSANTS
; FILE REFERENCE: 078003-0277150
; CURRENT APPLICATION NUMBER: US/09/886,055
; CURRENT FILING DATE: 2001-06-22
; PRIOR APPLICATION NUMBER: 60/213,812
; PRIOR FILING DATE: 2000-06-22
; NUMBER OF SEQ ID NOS: 522
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 431
; LENGTH: 975

; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
; US-09-497-967-12

Query Match      8.3%; Score 212; DB 5; Length 72;
Best Local Similarity 53.6%; Pred. No. 4.3e-11;
Matches 37; Conservative 12; Mismatches 20; Indels 0; Gaps 0;

QY 382 CPAGTVLTDGTTSTYKQAASECVKCAANFYTTKOTDWWAGIDTCTSCNKKLTSAGAEANLP 441
DB 1 CPAGTVLDDGTSTNFVASATECTKCSAGFFASKTTGTAGTDTCTCTCKLTSGATAKYI 60
QY 442 ESAKKNQOC 450
DB 61 AEATQKQOC 69

RESULT 14
US-09-497-967-12
; Sequence 12, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Clark, Theodore G.
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHTHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 72
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
; US-09-497-967-12

QY 307 QCNIACPDGTATAGATNYVILQTECLNCAANFYFDGNFQAGSSRCK-ACPANKVOGAV 365
DB 3782 DCTTCAAGTGTATAG-TGACCCCTGCTCCCA-----CCGATGCAGACAAGGATGAT 3831
QY 366 ----ATAGATFLIAQALECPAGTVLTDGTTSTYKQAASECVKCAANFYTTKOTDWWAG 421
DB 3832 GGAGAGCTGGTGCATCDCAATAGATACAGGATCTTAGCGGCTTTCCA-----TGG 3881
QY 422 IDTCTSCNKKLTSAGAEANLPESAKKNQOCDEFA 453
DB 3882 TTTCTGCTGDTAGACAGTAATAAGTTCGGA 3913

RESULT 13
US-09-497-967-12
; Sequence 12, Application US/09497967
; GENERAL INFORMATION:
; APPLICANT: Clark, Theodore G.
; APPLICANT: Dickerson, Jr., Harry W.
; APPLICANT: Lin, Tian-Long
; TITLE OF INVENTION: DIAGNOSTIC AND PROTECTIVE ANTIGEN GENE SEQUENCES OF
; TITLE OF INVENTION: ICHTHYOPHTHIRIUS
; FILE REFERENCE: 235.00170101
; CURRENT APPLICATION NUMBER: US/09/497,967
; CURRENT FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/131,121
; PRIOR FILING DATE: 1999-04-27
; PRIOR APPLICATION NUMBER: 60/118,634
; PRIOR FILING DATE: 1999-02-04
; PRIOR APPLICATION NUMBER: 60/122,372
; PRIOR FILING DATE: 1999-03-02
; PRIOR FILING DATE: 1999-03-17
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 12
; LENGTH: 72
; TYPE: PRT
; ORGANISM: Ichthyophthirius multifiliis
; US-09-497-967-12

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Db 91 GGNGTCGNGGAGCNGTGTGAGTGGGAAGAA-----GGCNAC 128
QY 138 TACPVNRVGGALTAGNAATIVACNVACPTGTALDDGVTTDYVRSFTECVKRLNIFYNG 197
Db 129 GTCAANAAGGACCAATATT-----TGCAA-----NG 154
QY 198 NNGN-----TPFNPGRKSQCTPCPAIKPANVAQATLGNDAITTAQCN--VACPDGTI 246
Db 155 NNGNCCAGGCTGTNCNCGGCGAGTTTGTAAAAAANAANA--GAACNGCGACAGACA 212
QY 247 SAACVNNVQAQNTFC--TNCAPNFYNNNAPNFNPGNSTCLPCPANKDYGAEATAGGAATL 304
Db 213 AGTGTNNGTTGACCCGGAAGCNAAGTGGATNCAGGAGTAC-CTGGAGNNAACTATGACAA 271
QY 305 AKO---CNIACPDGTATAGSATNYVILQTECLNCRANFYFDGNNFQAGSSRCACAPANKV 361
Db 272 ANTAAGCGCAACAGCCAAAGAGG--ACTTNCGGCTA-----GACCCACTCG-- 315
QY 362 QGAVATAGGTATLIAQCALECPAGTVLTDGTTSTYKQAASECVKCAA 408
Db 316 -----AGGAAAACTAAAAACCTTGTGAGAGATGA--AAGGNCAAAGA 354
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Search completed: December 26, 2001, 10:38:18  
Job time: 169 sec

